VIDEOTRONIC V653.G2
USER'S MANUAL

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WARNING

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.Prior of the installation of the unit described in this manual, user should read this manual carefully to be instructed properly on installation, use and maintenance of the unit.

.***Failing to read this manual and operate accordingly may cause damage to the user or the unit****.*

.FASEP 2000 srl shall not be responsible for inconvenience, breakdown, accidents due to uncomplete knowledge of this manual or uncomplete application of raccomendations described in this manual.

.FASP 2000 srl shall not be responsible for inconvenience, breakdown, accidents due to unauthorized modifications of the unit, use of non-original or unauthorized accessories (see Accessories listing in this manual for a list of original accessories available for this model).

.***FASEP 2000 srl shall not be responsible for any inconvenience, breakdown, accidents caused directly or indirectly by not qualified service. Service to any parts by not qualified persons will void warranty and will void any right of the owner of the unit.***

SYMBOLS AND CONVENTIONS
To speed the retrieval of main information and make easy to understand the instructions, this manual uses the following typing conventions:

<NAME OF THE PUSH BUTTON>		Used to indicate name of push-buttons on the control panel.
DISPLAY		Used to indicate text or number visible on the displays on the control panel.
☺	**ADVICES**	Contain useful advices or solutions, evidence d with respect to the rest of the text.
☝	**NOTE**	Notes contain important information, evidenced to the rest of the text.
✋	**WARNING**	Warning messages appears corresponding to procedures that, if not properly observed, may lead to loose of data or cause damage to the unit.
⚠	**CAUTION**	Caution messages appears corresponding to procedures that, if not properly observed, may cause injuries to the user.

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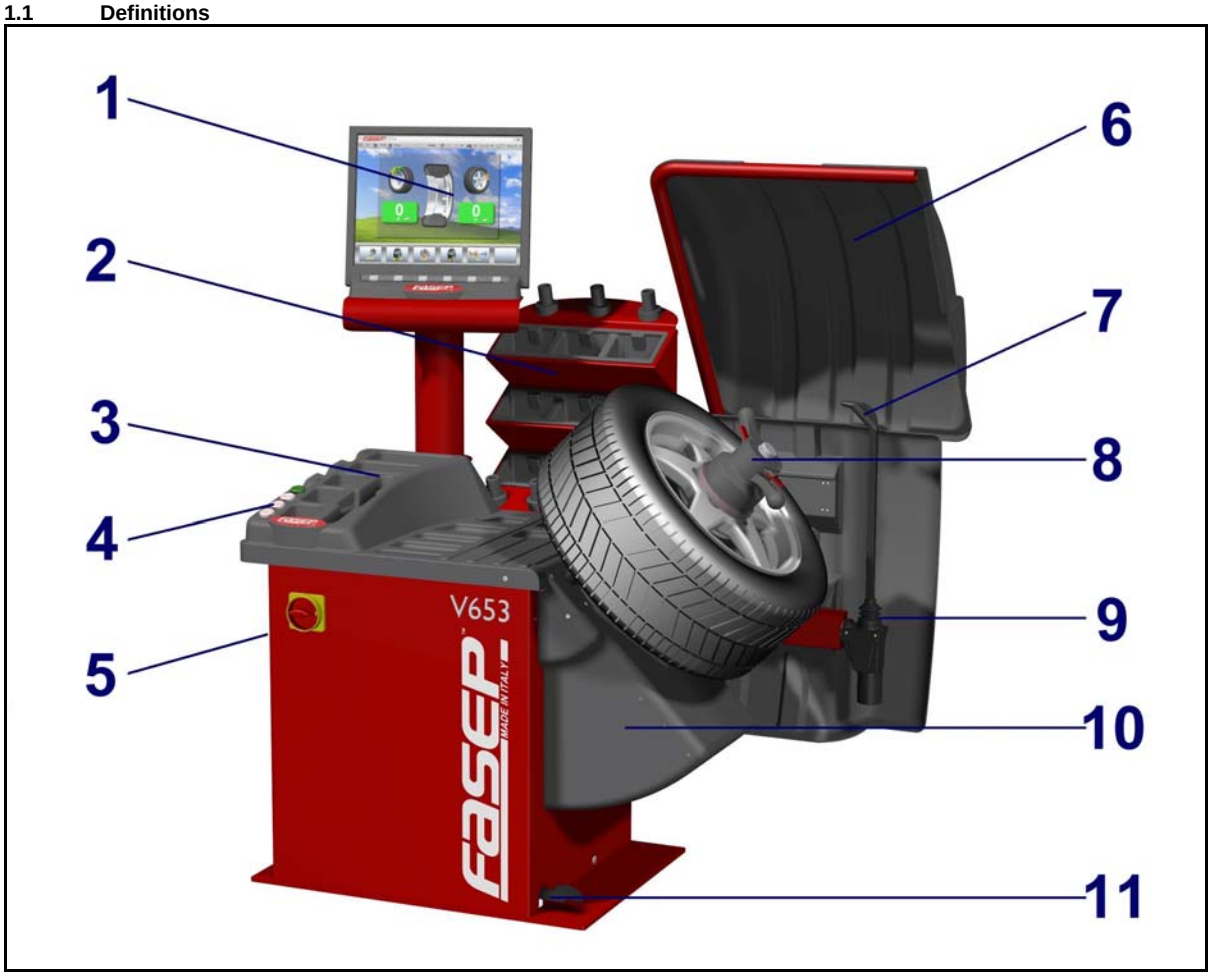
1 PRESENTATION

1.0 Intended Use

This unit is designed to measure and correct static and dynamic unbalance of vehicle wheel, the dimension and weight of which are within the working range of the machine (see "Technical Data"appendix for reference)
This unit is meant for a professional use. Operator shall be properly trained before use. Training Course is not included in the price of the unit and must be purchased separately.
This unit is designed for indoor use only (see "Environmental Data"appendix for reference).

⚠ **CAUTION:** *This unit is designed to spin vehicle wheels only, within the range of dimensions and weight approved (see "Technical Data"appendix for reference). Special adaptors suit this purpose. Do not attempt to use the machine to spin anything else. Unproper locking may cause the part being spinned to be ejected, causing damage to the unit itself, the operator or anything in the in the neighboorhood.*

1.1 Definitions

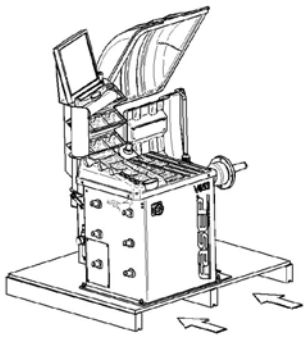


1. Monitor
2. Back-mounted weight-compartments
3. Weights and tools trays
4. Interface icons + buttons
5. Side flange-holders
6. Wheel guard
7. EMS External Measuring system
8. Quick lock + HD shaft
9. Lower wheel guard
10. Tilt-system
11. Foot-pedal electro-magnetic brake

2 INSTALLATION

2.1 Moving the unit

WARNING *When the unit has to be moved: never lift balancer by motor shaft or by neighborhood of it.*



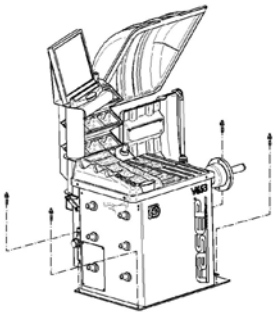
2.2 Assembling the unit

For ease of transportation, the wheel balancer might be disassembled into units. If necessary, assembling instruction are provided within each package..

2.3 Installation

The wheel balancer must be installed on a firm and level ground.

NOTE: *the machine must be secured to the floor. Using four holes in the base and anchor bolts provided*



2.4 Electrical Hookup

CAUTION: *Failure to follow these instructions can results in damage to unit or create an electrical hazard and will void warranty..*

2.4.1 Electrical hookup is to be provided by a qualified electrician.

2.4.2 A fusible wall-mounted switchbox is required at the installation site. This switch should provide on-off control and overload protection for your wheel balancer only. The switchbox should be fused with time-delay fuse(s) in accordance with the power rating specified on your wheel balancer.

2.4.3 Electrical connection of the machine should be by plug connectors.

2.4.4 The balancer must be effectively connected to ground. The electric cord is regularly provided with a ground terminal.

2.4.5 Make sure that Power Rate Specifications for your wheel balancer (refer to nameplate on the wheel balancer) comply with those provided by the external power source.

CAUTION *After electrical hookup has been performed unit is ready to operate. Always observe pertinent safety precautions when operating the unit (see Appendix tables for an overview of relevant Safety requirement).*

2.5 Compressed air Hookup (PL models only)

CAUTION *Failure to follow these instructions can result in damage to unit or create a hazard and will void warranty.*

1. *Compressed Air hookup is to be provided by a qualified technician, under the local safety requirements, in line with relevant national standards and regulations. All fitting and hoses must conform to local codes.*
2. *A wall-mounted lubricator and water-separator is required at the installation site.*
3. *Compressed Air circuit to the balancer shall be regulated to a maximum pressure of 7 atm. Overpressure could compromise cylinder operation.*

2.5.1 CONNECT TO AIR SUPPLY:
The machine is fitted with a universal connector and therefore no other special or additional fitting is required. Push all the way onto the connector a high pressure rubber air-hose and secure it.

3 USE OF CONTROL PANEL

Fig. 5 Panel V653

3.1 Meaning of the icons on the screen

Fig. 6

Select balancing mode

Fig. 7

APS Function

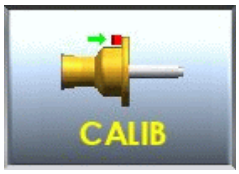


Fig. 8

Calibration

Fig. 9

Delete last character in input activation code

Fig. 10

Change selection

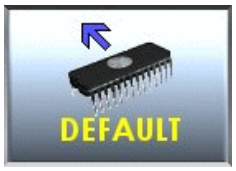


Fig. 11

Set default values

Fig. 12

Diagnostic

Fig. 13

Key down

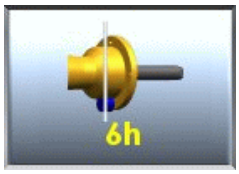


Fig. 14

Position calibration

Fig. 15

Go to previous page

Fig. 16

Fine resolution

Fig. 17

Access to Information center

Fig. 18

Access to page measures

Fig. 19

Laser calibration

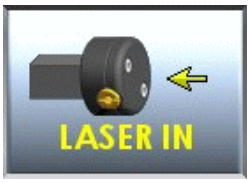


Fig. 20

Put in the rod laser in rest position

Fig. 21

Start laser

Fig. 22

Extract fully rod laser

Fig. 23

Manul input measures

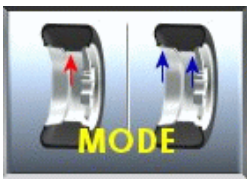


Fig. 24

Set Dynamic/Static

Fig. 25

Mode moto

Fig. 26

Key SET/OK

Fig. 27

Double operator

Fig. 28

Optimize

Fig. 29

Restart software

Fig. 30

Reset partial statistics

Fig. 31

Reset variation in page Sensor

Fig. 32

Save

Fig. 33

Set measures

Fig. 34

Go to setup menù

Fig. 35

Skip current operation

Fig. 36

Split function

Fig. 37

Stop turning wheel

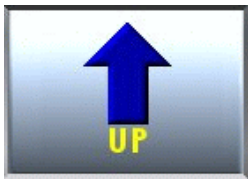


Fig. 38

Key up

Fig. 39

View menù and selection (UP/DOWN

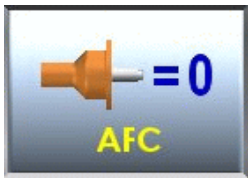
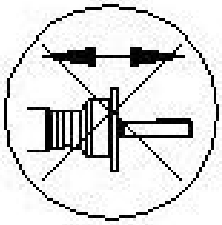


Fig. 40

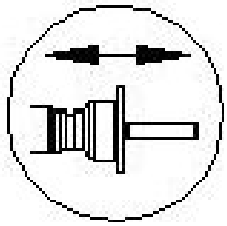
Automatic flange calibration

3.2 Meaning of the command keys



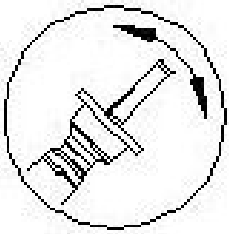
Disable open pneumatic lock (safety for flange use)

Fig. 41



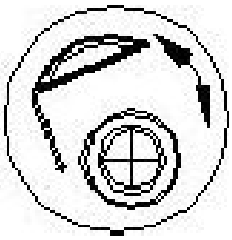
Open / close pneumatic lock

Fig. 42



Tilting

Fig. 43



Open / close wheel guard

Fig. 44

4 CALIBRATION OF WHEEL BALANCER

4.1 How to calibrate the wheel balancer

NOTE: *the following symptoms indicate need for calibration::*

a) check calibration program fails.
b) constant low or high weight readings.
c) indicated point of unbalance constantly wrong
d) more than 2 spins required to balance wheels repeatedly.

Fig. 45

Switch on the wheel balancer.

Select **SET UP > CALIBRATION > SET/OK > CALIBRATION > SET/OK.**

Spin with no wheel on shaft (Fig. 46)

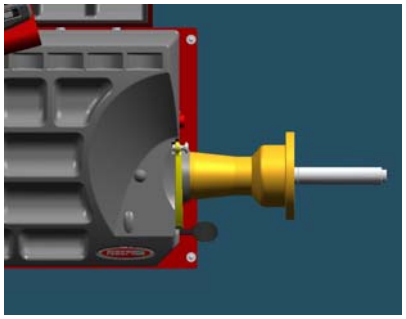


Fig. 46

Close the wheel guard or press **<START>**.

At the end of the spin, put a wheel (Fig. 47) and close the wheel guard or press **<START>**.

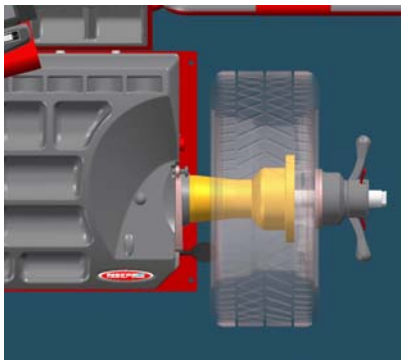


Fig. 47

At the end of the spin, put the calibration weight (Fig. 48) and close the wheel guard or press **<START>**.

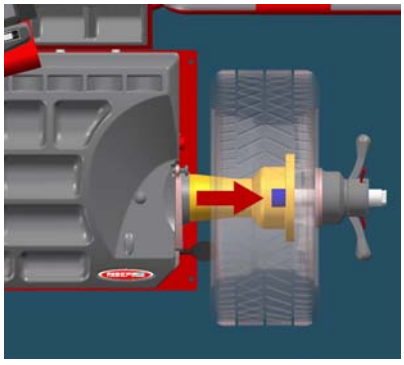


Fig. 48

4.2 How to control the calibration of wheel balancer and position weight

Fig. 49

Switch on the wheel balancer.

Select **SET UP > CALIBRATION > SET/OK > CHECK CALIBRATION > SET/OK.**

Put a wheel on the shaft and press **<START>** (Fig50).

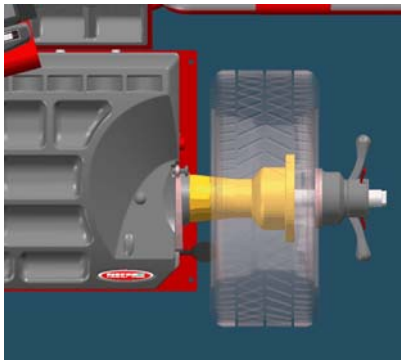


Fig. 50

Put the calibration weight (Fig.51) and press **<SET/OK>**.

Close the wheel guard or press **<START>**.

At the end of the spin, **160-0** will show on the video (tolerance allowed is ±10).

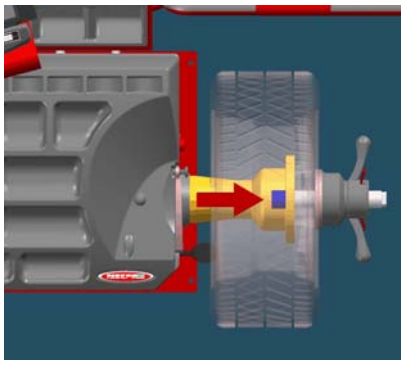


Fig. 51

Put the weight at 6h o'clock: the weight indicators of internal side must be both green.

If not, press **<6h>.**

Put the weight at 6h o'clock and press **<SET OK>**.

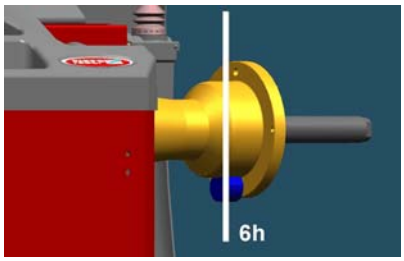


Fig. 52

5 Calibration ALU-SE

Switch on the wheel balancer.

MAIN MENU > MENU > RESET > **CALIB** > **ALU-SE CALIBRATION** > **SET/OK** (fig. 53).

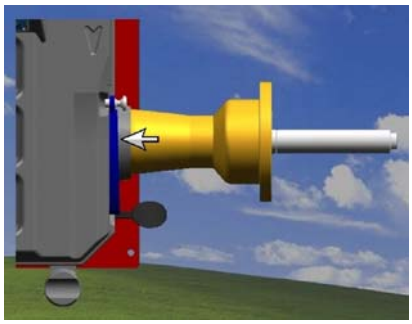


Fig. 53

Put the rod on rest position (fig.53) and press **SET/ OK.**

Put the rod on the flange (fig.54) and press **SET/ OK.**

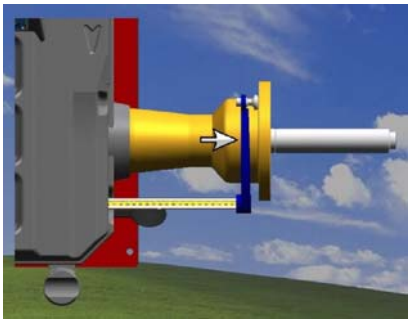


Fig. 54

Select width of wheel

Put the rod on internal side of the rim (fig.55) and press **SET/OK.**

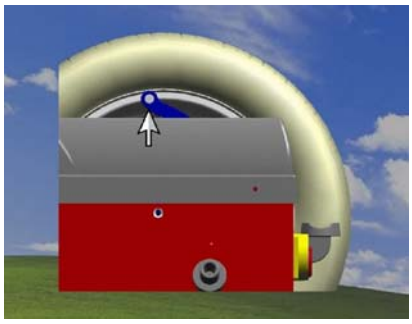


Fig. 55

Press **<ESC>** to go back to standard use.

6 Calibration SME

Switch on the wheel balancer.

MAIN MENU > MENU > RESET > **CALIB** > **SME CALIBRATION** > **SET/OK** (fig. 56)

Put the rod on rest position (fig. 56) and press **SET/ OK.**

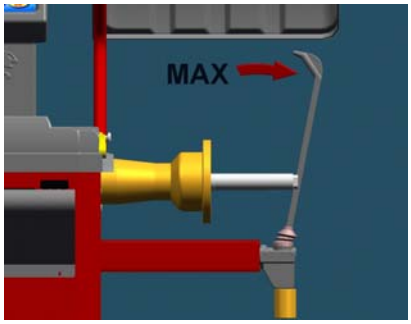


Fig. 56

Put the rod (fig. 57) and press **SET/OK.**

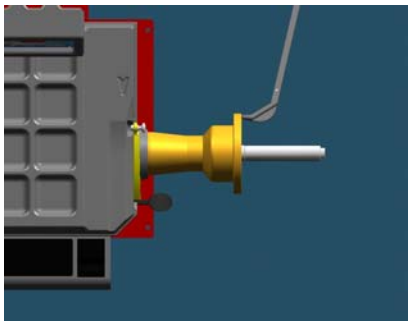


Fig. 57

Press **<ESC>** to go back to standard use.

7 MEASUREMENT AND CORRECTION OF UMBALANCE

7.1 Placing the wheel rim on the wheel balancer

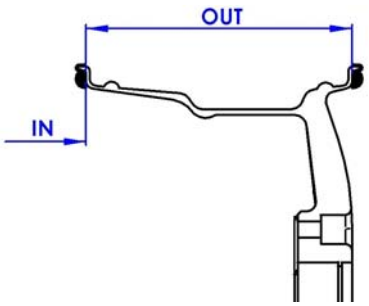
7.1.1 Select the cone or flange suitable for the wheel to be balanced. Specific mounting instructions are delivered with each flange

NOTE: *the operation of centering and tightening of the wheel on the flanges is of basic importance for correct balancing. Good results depend on proper performance of these procedures.*
To accurately clean up the superficial ones of connection before whichever operation.

CAUTION: *Always make sure flanges are correctly locked on the motor shaft and wheel is correctly locked on the flange being used.*

7.2 Input of Rim Dimensions (external measuring system version)

for V65x, V64x, V55x-D (automatic input of all data)



MAIN MENU > INPUT

Insert the distance (fig.59).

Insert the width (fig.60).

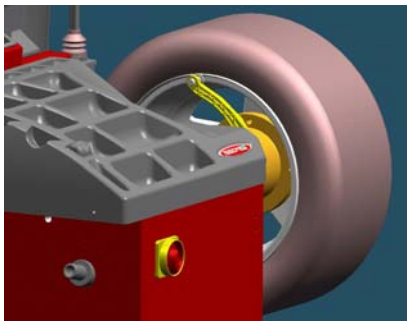


Fig. 59: Distance

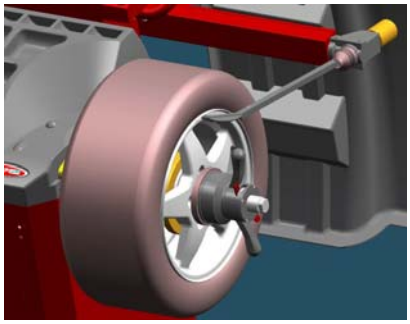
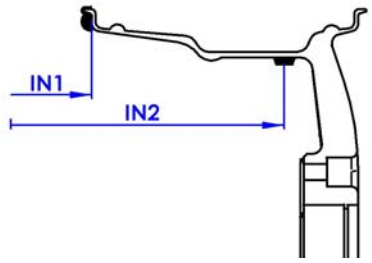


Fig. 60: Width

7.3 Input of Rim Dimensions (ALU-SE or LASER version)



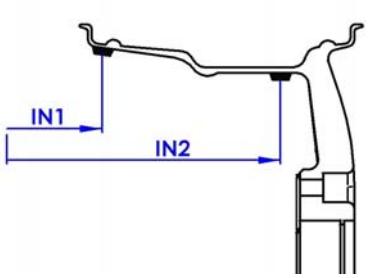
MAIN MENU > INPUT

Press **ALU MODE** untill the required position of weight is on the video (fig.61).

Insert the distance (IN1).

Insert the distance (IN2).

Fig. 61



Press **ALU MODE** untill the required position of weight is on the video (fig.61).

Insert the distance (IN1).

Insert the distance (IN2).

Fig. 62

7.4 Detecting and correcting umbalance

7.4.1 After setting wheel dimensions, press **<START>** or close the safety cover to spin the wheel and start the measurement run.

⚠ **CAUTION:** *wheel start automatically when safety cover is closed.*

7.4.2 At the end of the spin the wheel will brake automatically and the display will show the weight position and weight requirement to correct the wheel's umbalance.

7.4.3 Apply the weights (fig.63, fig.64). If umbalance shown is 0, press **<FINE>** to show residual umbalance.

Fig. 63

Fig. 64

7.5 How to apply the weight using ALU-SE applicator

Fig. 65

Place the weight as in the picture 66.

Turn the wheel until reach the application position of the weight (fig. 65).

Move the rod until reach the application position of the weight (fig. 66).

Apply the weight (fig. 67).

Repeat the procedure for the other side.

.

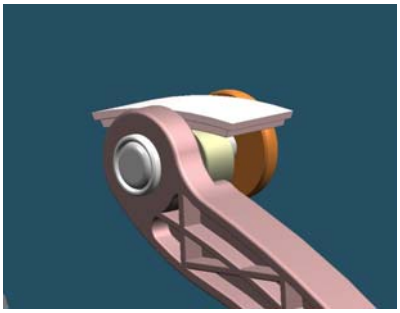


Fig. 66

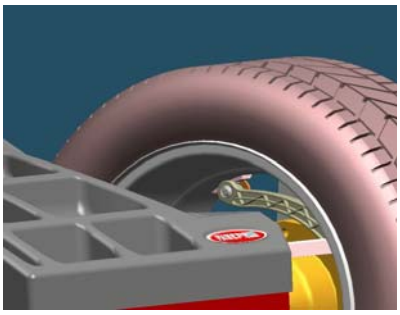


Fig. 67

7.6 How to apply the weight using LASER

Fig. 68

Turn the wheel until the position weight indicators of one side are both green (fig. 68).

The laser come out to show the point of application of the weight (fig. 69).

Apply the weight on the laser dot.

Repeat the procedure for the other side.

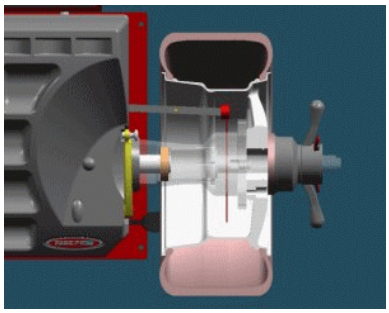


Fig. 69

8 HOW TO OPTIMIZE UNBALANCE OF THE WHEEL

8.1.1 MAIN MENU > OPTIMIZE

Measure the unbalance of the rim only (fig. 70).

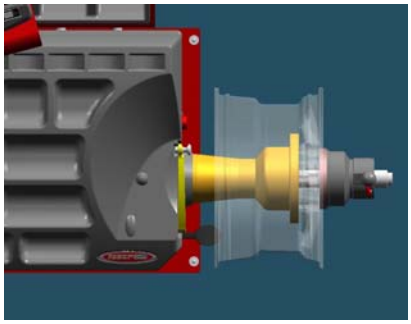


Fig. 70 first spin, rim only

Mount the tire on the rim and put the wheel on the shaft (fig.71).

Spin the wheel

Select the optimization and follow the video instruction.

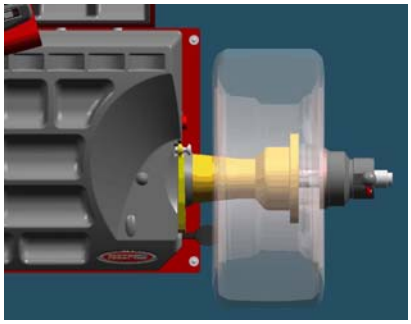


Fig. 71 second spin, complete wheel

WARNING: *Balancing with flanges, put the accessories assembled to the rim during the complete operations.*

NOTE: *Selection of optimization: the green solution is the advised from the machine. The user can be choose also one of the other.*

9 SPECIAL FUNCTIONS

9.1 Language selection

9.1.1 MAIN MENU >SET UP > USER SET UP > LANGUAGE > SET OK >.
9.1.2 Select the language and press SET OK.

9.2 Setup

9.2.1 MAIN MENU >SET UP > USER SET UP .

9.2.2 Select item and press SET OK.

9.3 Personalization

9.3.1 MAIN MENU > PERSONAL.

9.3.2 Follow the instruction on video to insert the personalization.

9.3.3 Press SAVE to memorize.

9.4 Run-out check program

9.4.1 Insert the wheel dimensions.

9.4.2 MENU > RUNOUT.

9.4.3 Put the rod (fig. 72) and turn slowly the wheel for 360˚.

Fig. 72 Runout

APPENDIX

A: Technical data

Power requirement	400W	
Speed Balancing	98RPM	
Measuring time	4-15 s.	
Accuracy	±1grammo (±1/28 once)	
Wheel Dimensions	**Diameter Rim diameter**	8" (200 mm) - 26" (650 mm)
	Rim Width (with wheel-guard)	max 16" (415mm)
	Wheel Weight	max 90 Kg (198Lbs)

Wheel balancer dimensions

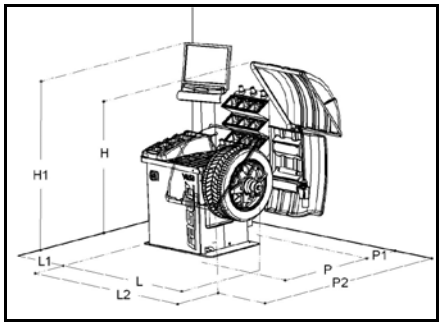


Fig. 73: Measures

	V653
L (mm)	1120
L1 (mm)	500
L2 (mm)	1230
P (mm)	1030
P1 (mm)	200
P2 (mm)	1450
H (mm)	1390
H1 (mm)	1440
Peso (kg)	167

B: Environmental Data, Safety Features and Requirements

Environmental Data

[*Operating conditions*]
This unit is designed for indoor use only.
Temperature: 0 to 45˚C
Relative Humidity: 5 to 80% a 40˚

[*Storage conditions*]
Package is designed for indoor storage only.
Temperature: -25˚ to 70˚C
Relative humidity: 5 at 95% to40˚C

Safety Features

1. The Balance Weights Holder may be removed for servicing. It is secured to the machine body through screws so that only voluntarily it may be removed. Removal of this protection is therefore restricted to Authorized Service Engineers.
2. The Control Panel may be removed for servicing. It is secured to the machine body through screws so that only voluntarily it may be removed. Removal of this protection is therefore restricted to Authorized Service Engineers.

CAUTION: *The safety cover is anyway required when using the motorcycle adapter.*

WARNING *FASEP 2000 srl shall not be responsible for any inconvenience, breakdown, accidents caused directly or indirectly by unauthorized service. Service to any parts by unauthorized engineers will void warranty and will any right of the owner of the unit..*

NOTE: *As this unit runs at speed below 100rpm, a safety cover is not required. However a safety cover is recomended when balancing wheels with diameter bigger then 20".*

General Safety Requirement

[*before using/servicing this unit*]

1. Read this instruction sheet and the whole user's manual before operating or servicing the wheel balancer.
2. Make sure electrical power source conforms to requirements shown on nameplate (see also model identification chart for reference).
3. Make sure the unit has a stable position.

[when using the unit]

4. Protect power leading to the unit from damage.
5. When work area is being washed, make sure unit is adequately protected.
6. Remove all stones and mud lodged in tire treads before balancing the wheel.
7. Do not touch spinning wheel. Always use Safety Safety cover to be protected.
8. Make sure counterweights are securely attached before checking residual umbalance.

[when servicing the unit]

9. Make sure power sources are disconnected before service on the unit is performed.
10. Service to PCB, electrical and mechanical parts should be done only by an Authorized FASEP 2000 Service Center.

Safety Features of the Wheel Balancer

This product was designed and built according to the current European Safety regulation (CE). Several protective devices are installed on the machine along with indications of danger.

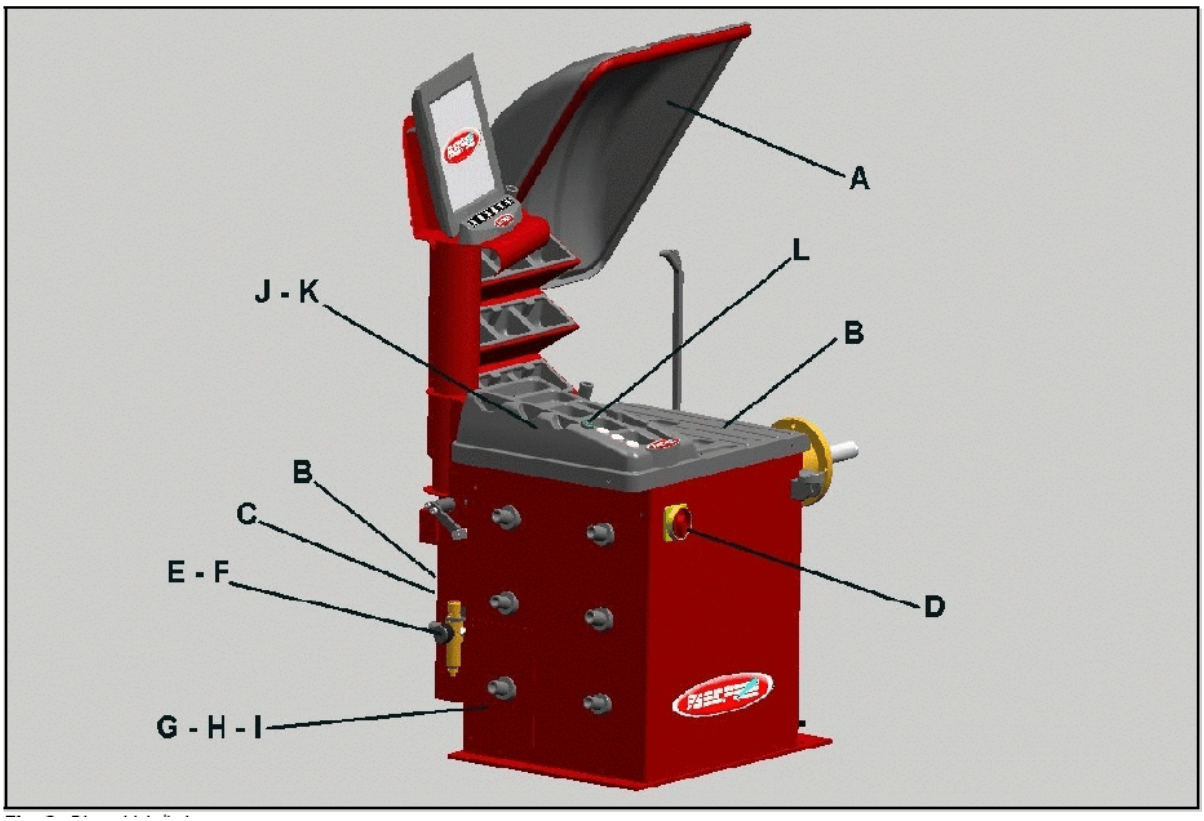


Fig. 74 Protective devices

The wheel balancer is equipped with the following safety devices:

A. Protective wheel-guard: electrically interlocked to the machine, it prevents dangerous ejection of parts from the wheels under examination, delineating the work area to avoid contact with parts in rotation.
B. Protective covers: protect access to electrical, mechanical and pneumatic parts of the machine.
C. Plug-socket combination: for the cutting of power supply.
D. Electric Power Switch yellow / red padlock: functions as emergency stop.
E. Quick connection to air pipe: allows the detachment from the air.
F. Filter-regulator: regulates the air pressure input to avoid overpressure inside the pneumatic system of the wheel balancer
G. Pressure gauge: prevent the operation of the machine in cause of insufficient air pressure.
H. One-way valve: maintain pressure in the pneumatic circuit, prevents unwanted movements due to powering of machines.
I. Closed-center valve: operating an emergency or following a power failure stops the movement of tilting-system.
J. Beep sound related to the movement of protective wheel-guard: after the operator had pressed the button for close the wheel-guard, the beep sound warning of the imminent closing movement and end the cycle of balancing warns of the movement for opening.
K.
L. Command button **Safety lock**: when it is active (light green on) does not allow the pneumatic lock to operate.

There are aslo labels and pictograms laws for the display of residual risks.

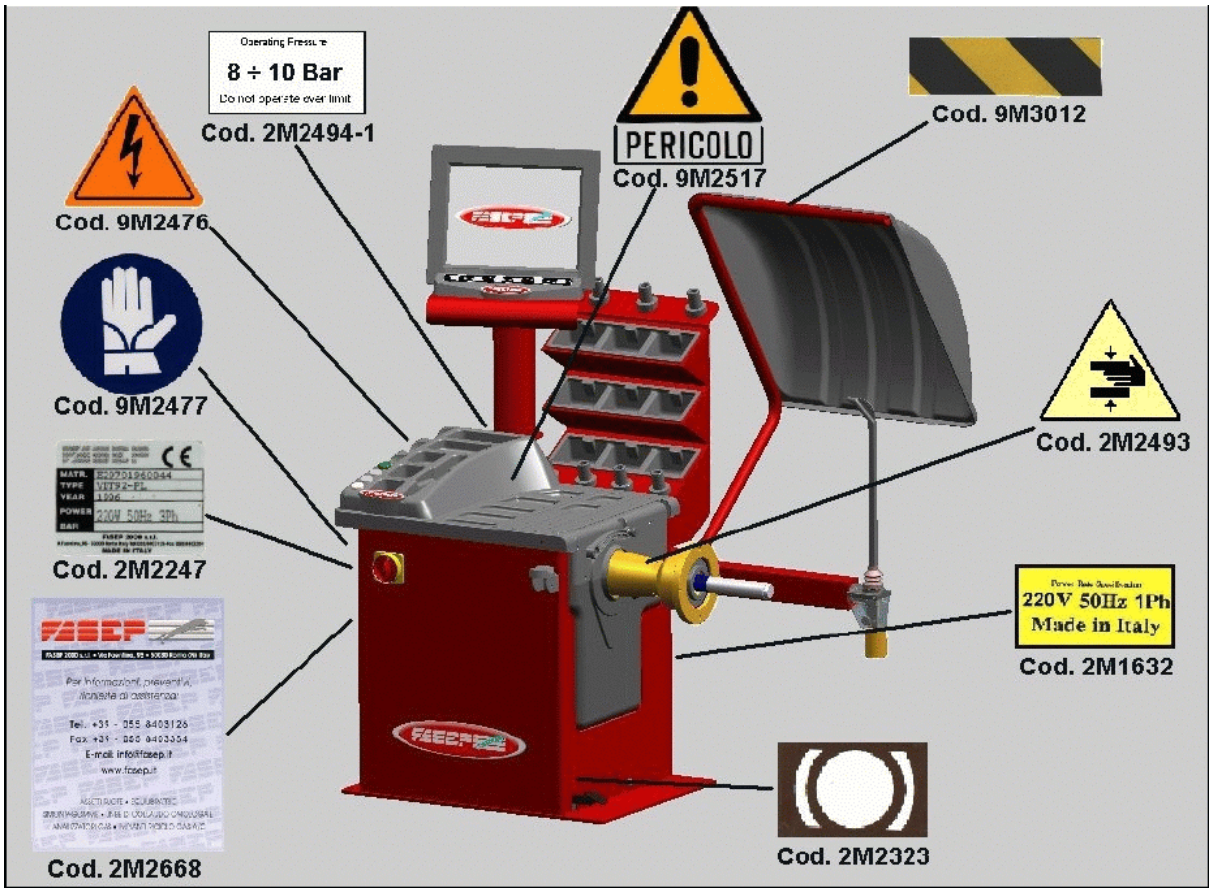


Fig. 75 Labels applied to wheel balancer

List of labels applied to wheel balancer:

2M2668	Label "Info Fasep"	**2M2247**	"Serial number"
9M2477	"Should Use gloves"	**9M2476**	"Danger high voltage"
2M2494-1	"Maximum operating pressure"	**9M2517**	"Warning danger"
9M3012	"Tape yellow/black"	**2M2493**	"Danger of crushing"
2M1632	"Specific power"	**2M2323**	"Parking brake"

In case of poor readability or damaged plates applied to the machine, the user must order the missing label, using the codes mentioned, and must reposition it in the same place as the existing one.

The safe use of this product is subject to the limitations technical "Technical Features" and "Environmental Features" listed in Appendix B